

In the Claims

- ✓ Please cancel Claims 1, 2, and 5.
- ✓ Please rewrite Claim 3 as follows:

3. (Amended) A method of producing a thin film transistor, said method comprising:

preparing a plasma CVD apparatus including a radio-frequency electrode and a susceptor electrode disposed in opposed relation and installed in a film forming chamber;

bringing a gas mixture of silane gas and ammonia gas into a plasma state under a desired radio-frequency electric field formed between said radio-frequency electrode and said susceptor electrode, thereby forming a first gate insulating film on a gate electrode formed on a substrate;

bringing a gas mixture having the same composition as said gas mixture into a plasma state under a greater radio-frequency electric field than said radio-frequency electric field, thereby forming a second gate insulating film on said first gate insulating film; and

forming a semiconductor active film on said second gate insulating film.

(Please rewrite Claim 4 as follows:)

4. (Amended) A method of producing a thin film transistor, said method comprising:

preparing a plasma CVD apparatus including a radio-frequency electrode and a susceptor electrode disposed in opposed relation and installed in a film forming chamber;

bringing a gas mixture of silane gas and ammonia gas into a plasma state under a desired radio-frequency electric field formed between said radio-frequency electrode and said susceptor electrode, thereby forming a first gate insulating film on a gate electrode formed on a substrate;

bringing a gas mixture, in which silane gas and ammonia gas are mixed at such a mixing ratio as containing the ammonia gas at a greater proportion relative to the silane gas than in said mixture gas, into a plasma state under a radio-frequency electric field having the same intensity as said radio-frequency electric field, thereby forming a second gate insulating film on said first gate insulating film; and

forming a semiconductor active film on said second gate insulating film.